

Title (en)
IN VIVO BIOSENSOR

Title (de)
IN-VIVO-BIOSENSOR

Title (fr)
BIOCAPTEUR IN VIVO

Publication
EP 2872036 A1 20150520 (EN)

Application
EP 13820353 A 20130715

Priority
• US 201261672281 P 20120716
• US 2013050576 W 20130715

Abstract (en)
[origin: US2014018639A1] Certain embodiments comprise an implantable probe for rapid measurement of multiple neurochemicals on the cellular scale in the brain. Rapid detection of multiple chemicals in vivo (animal or humans) may provide an improved understanding of acute changes in neurochemicals that occur over several seconds. The neurotransmitter chemical sensing platform may provide for continuous in vivo sensing in trials of psychoactive drugs in the laboratory animal market. The high spatial resolution of the probe may allow for chemical detection around small groups of neurons, which may help to isolate the endogenous activity of different neuron types due to disease states. Neurochemical detection may also be used to measure tissue response to exogenous stimuli, such as pharmacodynamics of drugs. The high temporal and spatial resolutions and multi-neurochemical sensing of the probe may allow for detailed studies on in vivo brain response to both endogenous and exogenous stimuli.

IPC 8 full level
A61B 5/00 (2006.01)

CPC (source: EP US)
A61B 5/14546 (2013.01 - EP US); **A61B 5/14735** (2013.01 - EP US); **A61B 5/24** (2021.01 - EP US); **A61B 5/369** (2021.01 - US); **A61B 5/4836** (2013.01 - EP US); **A61B 5/4845** (2013.01 - EP US); **A61B 5/4848** (2013.01 - US); **A61B 5/6852** (2013.01 - EP US); **A61B 5/6876** (2013.01 - US); **A61N 1/0534** (2013.01 - EP US); **A61N 1/36139** (2013.01 - US); **A61B 2562/028** (2013.01 - EP US); **A61B 2562/125** (2013.01 - EP US); **A61N 1/0529** (2013.01 - US); **B82Y 15/00** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 2014018639 A1 20140116; CA 2879831 A1 20140123; CA 2879831 C 20190430; EP 2872036 A1 20150520; EP 2872036 A4 20160629; EP 2872036 B1 20190605; US 2015164397 A1 20150618; US 9883826 B2 20180206; WO 2014014849 A1 20140123

DOCDB simple family (application)
US 201313942692 A 20130715; CA 2879831 A 20130715; EP 13820353 A 20130715; US 2013050576 W 20130715; US 201314413257 A 20130715